

Application No. 09/263,374
After Final Response/Amendment "I" dated April 17, 2006
Reply to Office Action mailed January 24, 2005

REMARKS

Applicant respectfully requests reconsideration and allowance of the above-identified application. Claims 1-3, 5-9, 22-30, 37-49, and 51-62 are pending, of which claim 1 is an independent method claim, claim 22 is an independent device claim, and claims 48 and 56 are independent system claims.

Initially Applicant and Applicant's attorney express appreciation to the Examiner for the courtesies extended during the recent interviews held on March 21 and 24, 2006. The arguments submitted in this paper are consistent with those presented during the course of the interviews.

The Office action rejects the independent claims under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,014,129 to Umeda et al. ("*Umeda*") in view of U.S. Patent No. 5,929,444 to Leichner ("*Leichner*"). Further, the Office action rejects the independent claims under 35 U.S.C. § 102(e) as allegedly being anticipated by *Leichner*.¹ Applicant respectfully traverses these grounds of rejection.

Applicant's invention, as claimed for example in independent method claim 1, relates to positioning a cursor on a display screen using a remote control device. As noted during the interviews, Applicant's claimed invention advantageously allows for mapping functions or rules for the movement and positioning of a cursor to be dynamically modified or selected according to a particular computing task a user is performing or the particular region of the display screen at which the cursor is located. For example, when using a remote device that positions a cursor in a text-editing window based on angular displacement thereof, it is sometimes difficult to extend a text selection within a horizontal line without unintentionally slipping the cursor into an adjacent line above or below. This difficulty can be reduced by embodiments described within Applicant's claims by dynamically modifying a mapping function by adjusting the vertical scaling independent of the horizontal scaling when a user enters a text-editing mode. Of course, other modifications of the mapping functions may be desirable, and are encompassed and

¹ "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131. Applicants also note that "[i]n determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure.'" MPEP § 2121.01. In other words, a cited reference must be enabled with respect to each claim limitation.

In order to establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2143 (emphasis added). During examination, the pending claims are given their broadest reasonable interpretation, i.e., they are interpreted as broadly as their terms reasonably allow, consistent with the specification. MPEP §§ 2111 & 2111.01.

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contemplated within the claims. In any event, these modifications to the cursor movement and positioning are dynamically made based on (i) a particular computing task a user is performing (e.g., text-editing), or (ii) a particular region of the display screen to which user input is directed (the text-editing window).

Applicant respectfully submits that the combination of *Umeda* and *Leichner* taken either individually or as a whole does not render the independent claims anticipated or otherwise unpatentable for at least the reason that the combination does not disclose or suggest each and every element of these claims.

Umeda discloses a remote control that detects the inclination of a reference light source and a light receiving section to command a cursor on a screen. Col. 2, ll. 47-55. As noted by the Office action, however, *Umeda* does not disclose or suggest the use of mapping functions or rules to map received data corresponding to angular displacement of a remote control device into movement of a cursor, wherein the mapping functions or rules are dynamically modified or selected based on (i) a particular computing task a user is performing, or (ii) a particular region of the display screen to which user input is directed. Nevertheless, the Office action states that such feature is "implied" based on what *Umeda* does teach.² More specifically, the Office action states that *Umeda* teaches "of a computer display screen cursor control from a remote input device that functions like the well known mouse input device [] that can match a cursor with a button appearing at an optional position on a screen." (Citations omitted). The Office action then concludes that "as known in the art mouse devices are used to interface graphically with computer display screen to perform functions assigned to menu displays or smart buttons, which are associated with specific regions of a display, and map to specific tasks and functions."

As noted during the interviews (assuming such statement about what is implied in *Umeda* and allegedly well known in the art) the above assertion misrepresents what Applicant claims. In particular, as recited in claim 1, Applicant claims "using one or more mapping functions or rules to map the received data corresponding to angular displacement of the remote control device into

² Applicant respectfully notes that M.P.E.P. § 2112 discusses the requirements of a rejection based on inherency. This section quotes *Ex Parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) as stating that "[i]n relaying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." (Emphasis in original). M.P.E.P. § 2112 also states that "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (Emphasis in original).

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movement of the cursor, wherein said *mapping is dynamically modified* based on (i) a particular task a user is performing, or (ii) a particular region of the display screen to which user input is directed; and *positioning the cursor* on the display screen *in response to the mapped data*." (Emphasis added). Note, however, that the alleged functionality assigned to "menu displays" or "smart buttons" of well known mouse devices cannot possibly read on Applicant's claim as recited above. In particular, these actions *modify the display screen*, e.g., by activating a pull down menu or providing additional information about a particular object or button based on (i) *cursor position*, and/or (ii) *user input*. This functionality, however, is insufficient to support that *Umeda* either expressly or implicitly discloses or suggests dynamically modifying mapping functions or rules that map movement and/or positioning of a cursor based on (i) a particular task a user is performing, or (ii) a particular region of the display screen to which user input is directed, as recited in Applicant's independent claims.

Recognizing some of the deficiencies of *Umeda*, the Office action cites *Leichner*. *Leichner* discloses an aiming device that uses radiated energy. The aiming device monitors rotational and angular displacement changes, which are then used in various operations depending on the implementation. For example, when *Leichner* is used for a "shooting practice system, the rotational and angular displacement changes are used to provide technique feedback to the shooter as well as to predict shot placement." *Leichner* col. 5, ll. 12-21. Although *Leichner* does disclose the use of signal strength for determining a rough estimate of distance in order to scale sensitivity of the pointing indicator (*Leichner*, col. 5 ll. 58-61), *Leichner* does not disclose or suggest dynamically modifying or selecting mapping functions or rules to map movement of a cursor based on (i) a particular computing task a user is performing or (ii) a particular region of the display screen to which user input is directed. In fact, *Leichner* at most discloses modifying the sensitivity of a mapping function based on user distance from the display device. *Leichner*, however, does not modify mapping functions or rules based on a particular computing task a user is performing (e.g., text-editing) or based on a particular region of the display screen to which user input is directed (e.g., text-editing window). Accordingly, *Leichner* does not rectify those deficiencies noted above with regards to *Umeda*.

Nevertheless, the current Office action has modified the previous rejections by alleging that Applicant's independent claims are now anticipated by the *Leichner* reference. Applicant believes, however, that the above misunderstanding of Applicant's claimed invention as evident

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by the Office action's assertion above for what *Umeda* and other allegedly well known functions of mouse devices imply or disclose has lead the Office action to also erroneously believe that *Leichner* anticipates Applicant's claims. As shown above and generally agreed to in the interviews, however, such reliance is misplaced.

Because the combination of *Umeda* and *Leichner*—taken either individually or as a whole—does not explicitly or inherently disclose or suggest all of the elements of Applicant's independent claim 1, Applicant respectfully submits that the combination does not render claim 1 unpatentable. Applicant notes that the other independent claims (i.e., claims 22, 48, and 56) recite elements with similar features as those recited in claim 1; and are therefore patentably distinguishable over the cited art of record for at least those reasons stated above with regards to claim 1.

Based on at least the foregoing reasons, therefore, Applicant respectfully submits that the cited art fails to anticipate or make obvious Applicant's invention, as claimed. Applicant notes for the record that the other rejections and assertions of record with respect to the independent and dependent claims are now moot, and therefore need not be addressed individually. Accordingly, Applicant does not acquiesce to any assertions in the Office action that are not specifically addressed above, and hereby reserve the right to challenge any such assertions in the future if necessary or desired.

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In view of the foregoing, Applicant respectfully submits that the present application is in condition for allowance and notice to that effect is earnestly solicited. Should the Panel or Examiner have any questions regarding this response or the application in general, they are urged to contact the undersigned at (801) 533-9800.

Dated this 17th day of April, 2006.

Respectfully submitted,



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